

Appl. No. 09/927,835
Amtd. Dated October 31, 2003
Reply to Office Action of July 31, 2003

• • R E M A R K S / A R G U M E N T S • •

The Official Action of July 31, 2003 has been thoroughly studied. Accordingly, the changes presented herein for the application, considered together with the following remarks, are believed to be sufficient to place the application into condition for allowance.

By the present amendment, the title of the invention has been changed to "**DISPOSABLE UNDERGARMENT WITH ELASTICALLY STRETCHABLE WINGS.**"

In addition the specification has been changed at pages 4 and 5 to avoid the use of mathematical symbols, and at page 12 to include a recitation of reference numeral 18.

Independent claim 1 has been changed to recite that longitudinal upper ends of said first wings and longitudinal upper ends of said second wings coextensively overlap each other.

Support for this change to the claims can be readily found in the each of the drawing figures.

Also by the present amendment, claim 2 has been amended to avoid the use of pronouns.

Entry of the changes to the title, specification and claims is respectfully requested.

On page 2 of the Official Action the Examiner has objected to the drawings under 37 CFR §1.84(p)(5). Under this objection the Examiner correctly noted that reference numeral 18 found in the drawings was not discussed in the specification.

In response to the objection, the specification has been amended at page 12 to recite to reference numeral 18.

Appl. No: 09/927,835
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The Examiner objected to the disclosure, indicating that the mathematical symbols should be replaced with the corresponding text.

In response to this objection the specification has been changed at pages 4 and 5 in the manner requested by the Examiner.

Claim 1 and 2 stand rejected under 35 U.S.C. §112, first paragraph. Under this rejection the Examiner has taken the position that the specification does not describe how "stretch stress" is determined.

A search on the term "stretch stress" on the issued patents file of the USPTO website (www.uspto.gov) currently will retrieve 83 patents that recite "stretch stress." Of these 15 further include the term "diaper."

A similar search on "stretch stress" using the search engine "Google" uncovered 100 references of which samples are being submitted as Exhibits "A" and "B." Exhibit "A" is a definition of several physical properties, including "stretch stress." Exhibit "B" is a reference that provides a simple explanation of "stretch stress" in reference to stretching a rubber band.

These results indicate that the term "stretch stress" is an art-recognized term and that those skilled in the art would be familiar with the measurement of stretch stress and the factors that effect stretch stress.

Claims 1 and 2 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,200,299 to Heki.

Appl. No. 09/927,835
Amtd. Dated October 31, 2003
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For the reasons set forth below, it is submitted that each of the pending claims are allowable over Heki and therefore, the outstanding rejection of the claims as being anticipated by Heki should proper be withdrawn.

Favorable reconsideration by the Examiner is earnestly solicited.

The Examiner has relied upon Heki as disclosing a disposable undergarment that includes:

...a pair of elastically stretchable first wings extending from the side edge portions of at least one of the front and rear waist regions (6), said first wings having a first proximal side edge portion and a first free side edge portion being provided with means to connect the front and rear waist regions to each other (7), said first proximal side edge portions being contiguous to the transversely opposite side edge portions of the crotch region (figure 1) and a stretch stress generated in the first wings as the front and rear waist regions are connected to each other is exerted upon the undergarment in a waist-surrounding direction as well as in a thigh-surrounding direction (col. 9, lines 38-44) and a pair of elastically stretchable second wings extending outward from the transversely opposite side edge portion of the waist region in the transverse direction (20), said second wings being placed upon said first wings...

The Examiner's position that the "said second wings [of Heki] being placed upon said first wings" in reference to Fig. 7 is incorrect.

At column 8, lines 34-40 Heki teaches that:

...the ear part 6 may be formed in an elastic structure, and a strip of an unstretchable film or an unstretchable strand 30 may be attached to a peripheral portion of the elastic structure excluding an inner trapezoidal elastic portion corresponding to the stress relaxing structure 20 to use the inner trapezoidal elastic portion as the stress relaxing structure 20.

The Examiner has indicated that she is relying upon element 20 as Heki's second wings and element 6 as being Heki's first wings.

Appl. No. 09/927,835
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In this case the relaxing structure 20 is not placed upon the ear portion 6, as interpreted by the Examiner. Rather, the relaxing structure 20 is merely a central portion of the ear portion 6 which is surrounded by a peripheral portion 30 of the ear portion 6.

Moreover, Heki does not teach an embodiment or configuration in which longitudinal upper ends of the first wings and longitudinal upper ends of the second wings coextensively overlap each other, according to applicants' pending claims.

In applicants' invention the second wing causes a relatively large stretch stress to be exerted only in the waist-surrounding direction while the first wing causes a relatively small stretch stress to be exerted in the waist-surrounding direction as well as in the thigh-surrounding direction.

In contrast to applicants' invention, Heki divides a tensile force D applied to the fastening means into a component tensile force D1 acting on a waist lapping portion and a component tensile force D2 acting on a leg lapping portion.

The Examiner states that in Heki "...values of the stretch stress generated in the first wing (6) is less than values of a stretch stress being generated in the second wing."

This is not correct.

At column 8, lines 41-44 Heki teaches that:

When a tensile force is applied to the ear part 6, a tensile stress induced in the stress relaxing structure 20 is smaller than that which is induced in the peripheral portion of the ear part 6 surrounding the stress relaxing structure 20.

Appl. No. 09/927,835
Amtd. Dated October 31, 2003
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The Examiner has stated that the values of stretch stress of the first wing are less than the values of the stretch stress of the second wing because the second wing is easily stretchable and would have a greater stretch stress value than the first which is not as easily stretched.

This position is not accurate.

At column 9, lines 20-26 Heki teaches that:

The stress relaxing structure 20 that can be stretched by a small tensile force is thus formed in the sheet 21 forming the ear part 6. Since the periphery of the sheet 21 surrounding the stress relaxing structure 20 is unprocessed, the periphery of the sheet 21 does not yield to tension when the sheet 21 is tensioned or the periphery is harder to stretch than the stress relaxing structure 20.

As can be seen, Heki actually teaches that stretch stress generated in the stress relaxing structure 20 is small and the stretch stress generated in the peripheral portion surrounding the stress relaxing structure 20 is great. This means that the values of the stretch stress of the second wing are less than the values of the stretch stress in the first wing.

Based upon the above distinctions between Heki the present invention, and the overall teachings of Heki, properly considered as a whole, it is respectfully submitted that the Examiner cannot rely upon Heki as required under 35 U.S.C. §103 as anticipating applicants' claimed invention. It is, therefore, submitted that any reliance Heki would be improper inasmuch as Heki does not remotely anticipate, teach, suggest or render obvious the present invention.

It is submitted that the claims, as now amended, and the discussion contained herein clearly show that the claimed invention is novel and neither anticipated nor obvious over the teachings of Heki and the outstanding rejection of the claims should hence be withdrawn.

Appl. No. 09/927,835
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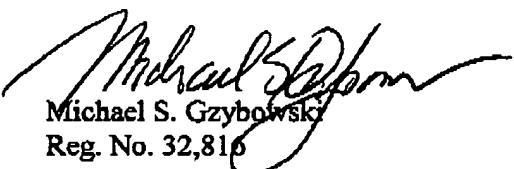
Therefore, reconsideration and withdrawal of the outstanding rejection of the claims and an early allowance of the claims is believed to be in order.

It is believed that the above represents a complete response to the Official Action and reconsideration is requested.

If upon consideration of the above, the Examiner should feel that there remains outstanding issues in the present application that could be resolved, the Examiner is invited to contact applicants' patent counsel at the telephone number given below to discuss such issues.

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,


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